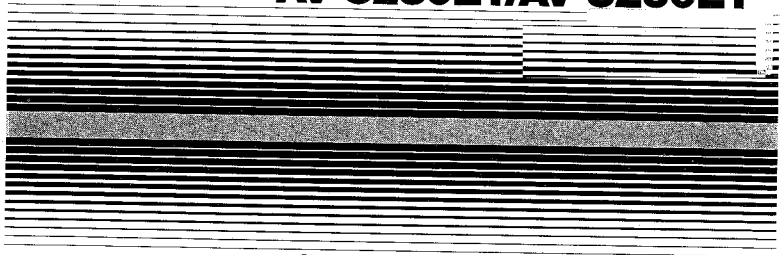
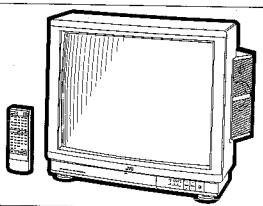
JVC Instruction Book

COLOUR TELEVISIONS AV-S280ET/AV-S250ET



nstruction Book: Colour televisions
edienungsanleitung: Farbfernsehgeräte
/anuel d'instructions: Téléviseurs couleur
ebruiksaanwijzing: Kleurentelevisie
ibro de instrucciones: Televisores en color
/anual de instruções: Televisor a cores



Thank you for purchasing a JVC colour TV set. Your new TV set carries many useful features. To ensure your complete understanding, please read all instructions in this booklet before operation.

This booklet is for the JVC AV-S280ET and AV-S250ET. The illustrations in this booklet show the AV-S250ET.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid improper installation and never position the unit where good ventilation is unattainable.
4. Do not allow objects or liquid into the cabinet openings.
5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover.

Caution:
When you do not use this TV set for a long period of time, be sure to disconnect the power plug from the AC outlet.

This instruction booklet is divided into six sections: English, German, French, Dutch, Spanish and Portuguese.

- English . . . . . Page 1 — 16
- German . . . . . Page 17 — 32
- French . . . . . Page 33 — 48
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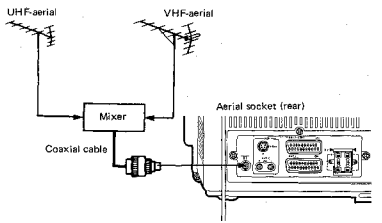
INSTALLATION

ENGLISH

AERIAL CONNECTIONS

An outdoor aerial is recommended for better TV picture reception. (For installation of the outdoor aerial system, consult your local dealer.)

Example



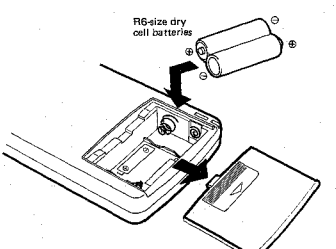
REMOTE CONTROL USE

Correct Use

- Point to the Remote Control Sensor ❽ of the TV set.
- The maximum operable distance is approximately 7 meters from the Remote Control Sensor, and no more than 30° to either side of center.
- Operation of the Remote Control is most effective when there is nothing between it and the Remote Control Sensor.
- Duration of the batteries is approximately 1 year. Replace the batteries when the remote operation becomes unstable.

Battery Installation/Notes

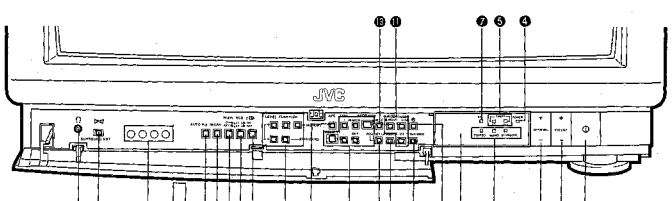
- Press and slide the cover in the direction of the arrow.
- Correctly install the batteries, observing (+/–) polarities as shown.
- Do not use a combination of old and new batteries or batteries of different types.
- If batteries become exhausted, remove and replace them soon.
- If Remote Control will not be used for more than 2 weeks, remove batteries.
- When battery leakage occurs, clean the battery compartment with a soft cloth and replace the batteries.



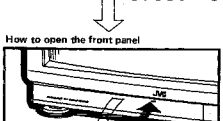
CONTROLS AND THEIR LOCATIONS

ENGLISH

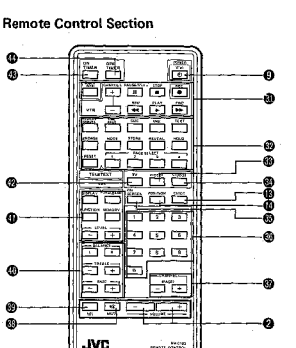
Front Panel Control Section



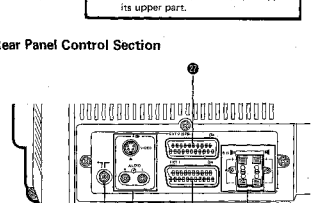
How to open the front panel



Remote Control Section



Rear Panel Control Section



❶ Main Power button (⏻)
❷ VOLUME (+/–) button(s)
❸ CHANNEL (+/–) button
❹ POWER indicator
❺ TIMER indicators
❻ Sound multiplex indicators
❼ AFC indicator
❽ Remote Control sensor
❾ Power button (⏻)
❿ TV/VIDEO button
⓫ Sound multiplex section
⓬ LANGUAGE button
⓭ CH/CC button
⓮ POSITION button
⓯ Channel preset section
⓰ AFC button
⓱ VSM (Video Status Memory) operating section (Front Panel)
⓲ S-input select button
⓳ RGB button
⓴ SKEW button
㉑ SECAM button
㉒ AUTO P/S button
㉓ Service adjustment controls*
㉔ External speaker switch (🔊)
㉕ Headphone jack (Ω)
㉖ External speaker terminals
㉗ EXT2 (S ⇨) connector
㉘ EXT1 connector
㉙ S-VIDEO/AUDIO input connectors (S ⇨)
㉚ Aerial socket
㉛ VTR operating section
㉜ TELETEXT operating section
㉝ VIDEO 1 button
㉞ VIDEO2 button
㉟ ON SCREEN button
㊱ 10-Digit keypad
㊲ CHANNEL (PAGE) (+/–) buttons
㊳ MUTE button (🔇)
㊴ I/II button
㊵ Sound adjustment section
㊶ VSM (Video Status Memory) operating section (Remote Control)
㊷ TV button
㊸ ON TIMER button
㊹ OFF TIMER button

* The adjustment controls for service personnels only. Do not turn them by yourself.

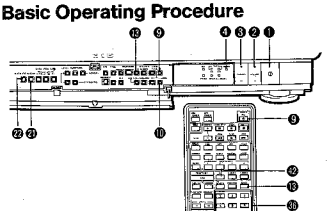
ENGLISH

First Preparations

First Preparations

- Connect aerial by following "Installation" instructions on page 2.
- Connect the power cord to the AC outlet. Do not defeat the plug. If you have difficulty to insert the plug, consult your local dealer.

Basic Operating Procedure



1 **Press Main Power button ❶** to engage the standby mode. The POWER indicator ❹ lights. Press again to turn the main power off. Keep this button set to the ON (standby) position. Only a small amount of current is used.

2 **Press POWER button ❾** either on the Remote Control or front panel to turn the power on.

Notes:
- If Main Power button ❶ is switched off while POWER button is on, the TV set can be switched on again using only the Main Power button.
- When the power is turned on, a click will be heard after a few minutes. This is normal. (AV-S280ET only)

3 **Press TV button ⓬** on the Remote Control or TV/VIDEO button ⓫ on the front panel to engage the TV mode.

Note: Each time the TV/VIDEO button is pressed, the mode changes in the following order.

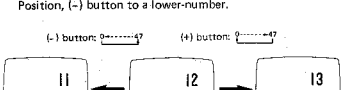
4 **Press either AUTO P/S button ⓯ or SECAM button ⓰ as required.**

AUTO P/S: Automatically switches between PAL and SECAM colour systems according to the incoming video signal.

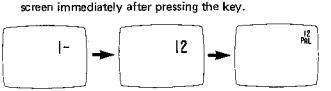
SECAM: If SECAM reception is poor (pictures blurred or distorted) when the AUTO P/S button pressed.

5 **Press CHANNEL (PAGE) (+/–) buttons ❽ on the Remote Control or CHANNEL (+/–) button ❸** to select the desired Channel Position.

Pressing the (+) button advances to a higher-number Channel Position, (–) button to a lower-number.



- Channel Positions can be selected directly by using 10-digit keypad ❽ on the Remote Control. For example, if you select Channel Position 12, press "1" first, then press "2". For Channel Positions of 1-digit numbers (for example, Channel Position 5), just press "5" or press "0" first, then press "5".
- Channel Positions 0 to 9 can be selected by a single press of an appropriate numeric key. For example, if you select Channel Position 5, press "5". When selecting Channel Positions 0 to 4, it will take about 3 seconds to display the channel on the screen. But when selecting Channel Positions 5 to 9, the picture comes on the screen immediately after pressing the key.



Note: For presetting channels, refer to "PRESETTING CHANNELS" on page 6.

Channel Selection by Real Channel Number

Selecting TV or cable channels by directly keying in the Real Channel number is also possible. Proceed as follows.

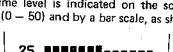
1) Press CH/CC button ⓮ to engage the Real Channel mode. After the Real Channel mode is once engaged, each time the CH/CC button is pressed, the TV set changes between "CH" (off-air TV broadcast) and "CC" (cable TV) mode. "CH" or "CC" appears on the screen and blinks to indicate the mode.

2) Select the desired Real Channel number by using the 10-digit keypad. For example, if you select Channel 25, press "2" first, the press "5". (When selecting channels 01 to 09, be sure to press "0" first.)

3) To return to the Channel Position mode, press POSITION button ⓭.

Notes:
- When you select channels, also refer to the TV/CABLE CHANNEL CONVERSION CHART on page 7.
- Turning the Main Power off and on in the Real Channel mode releases the Real Channel mode, and the Position mode is engaged. However, turning the power off and on with the power button on the front panel or the Remote Control does not change the mode.

6 Press VOLUME (+/–) button(s) ❷ on either the Remote Control or front panel to adjust audio volume to your desired listening level. Pressing (+) button (side) will make the sound louder, the (–) button (side) will make it softer. The volume level is indicated on the screen by reference numbers (0 – 50) and by a bar scale, as shown.



Note: The audio level can be made minimum instantly by pressing MUTE button ⓮ on the Remote Control. See "MUTE Button" on page 11.

ON-SCREEN DISPLAY

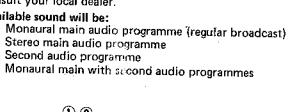
- Once the on-screen indication appears on the TV screen, it disappears in a few seconds. Ordinarily, only the channel number (either the Channel Position or Real Channel) or VIDEO mode, and the colour system (PAL or SECAM) indications can be kept displayed on the screen. See "ON SCREEN Button" on page 11.
- If the broadcast signals being received are weak, the on-screen display may be unclear or blurred.

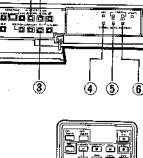
ENGLISH

SOUND MULTIPLEX BROADCAST RECEPTION (stereo/dual sound)

Your TV set incorporates a sound multiplex decoder that can receive stereo broadcasts and any accompanying second audio programme, such as a bilingual broadcast.
This function is available only when used with West Germany's sound multiplex TV system and cannot receive other sound multiplex TV systems of a different standard. For details, consult your local dealer.

Available sound will be:
(A) Monaural main audio programme (regular broadcast)
(B) Stereo main audio programme
(C) Second audio programme
(D) Monaural main with second audio programmes

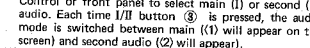




1 Stereo/Monaural Selection
When a stereo broadcast is received, STEREO indicator ④ or MONO indicator ⑤ lights. At this time:
1) If AUTO ST./MONO button ① is set to "AUTO ST. (▬)", the STEREO indicator ④ lights and stereo sound will be output from speakers.
2) If AUTO ST./MONO button ① is set to "MONO (▬)", the MONO indicator ⑤ lights and monaural sound will be output. (When AUTO ST./MONO button ① is set to this position, stereo sound cannot be output even if the stereo programme is broadcast.)

Notes:
- If AUTO ST./MONO button ① is kept always set to "AUTO ST. (▬)", stereo sound is output when a stereo broadcast is received, and monaural sound is output when a monaural broadcast is received, automatically.
- If the received stereo signal is weak, STEREO indicator ④ blinks and noise may be heard. In such a case, press AUTO ST./MONO button ① to "MONO (▬)" to engage the monaural mode for better sound reception.

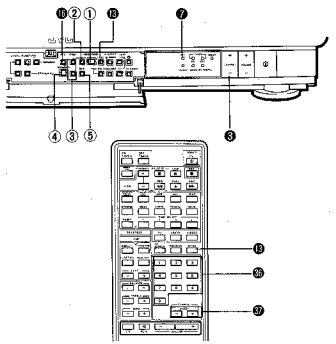
2 Main/Second Audio Selection
When a bilingual broadcast (second audio programme) is received, the bilingual indicator ⑥ lights and the sound described below is output from the speakers.
1) If the main/second mode select button ② is set to "I/II (▬)", press I/II button ⓮ on either the Remote Control or front panel to select main (I) or second (II) audio. Each time I/II button ⑧ is pressed, the audio mode is switched between main ((I) will appear on the screen) and second audio ((2) will appear).
2) If the main/second mode select button ② is set to "I-II (▬)", both main (I) and second audio (II) are output (main from the left speaker, second audio from the right) at the same time. (Switching between main and second audio is not possible.)



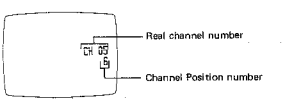
Note: If the received second audio signal is weak, the bilingual indicator blinks and the second audio will not be heard, and a switching noise may be heard. In such a case, press main/second mode select button ② to "I/II (▬)" to engage the main (I) mode for better sound reception.

PRESETTING CHANNELS

Your TV set has a channel memory function that can store up to 48 broadcast stations. Channel Position numbers are available from "0" to "47". Perform presetting TV and/or cable channels as follows.



1 Press PROGRAM button ① . The following display will appear.



2 Press either CHANNEL (+/-) button ⑧ on the front panel or CHANNEL (PAGE) (+/-) buttons ⑰ on the Remote Control to select a desired Channel Position number from "0" to "47".

3 Tune to a channel you wish to store in that Channel Position using either of the following methods. When a broadcast station is tuned, the AFC mode is engaged automatically (Automatic Fine-tuning Control function is activated), and AFC indicator ⑰ lights.

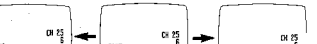
(A) Using SEARCH button ②

Press SEARCH button ②. (Press once slightly. If it is kept pressed, the tuner begins scanning the lower-frequency channels.) The tuner begins automatic scanning of higher-frequency channels. It stops when the nearest broadcast station is reached. Press again until the broadcast you wish to store appears on the screen. If you wish to stop scanning while the automatic scanning is being performed, press SEARCH button ②. By pressing SEARCH button ②, the tuner begins automatic scanning of lower-frequency channels. Release the SEARCH button when a desired station is reached. The scanning stops.

(B) Using the 10-digit keypad ⑱

Press CH/CC button ⑯ to engage the Real Channel mode. Then after selecting either the CH or CC mode, select the desired Reat Channel number you wish to store directly by using the 10-digit keypad. When selecting, refer to the TV/CABLE CHANNEL CONVERSION CHART on the next page.

4 If the tuning is unstable, press FINE (+/-) buttons ⑧ to make fine-tune to the station.



Press FINE (–) button | Tuning reference indicator | Press FINE (+) button

Notes:

- At this time, if the FINE (+/-) buttons are pressed, the AFC mode is released and the AFC indicator goes off. If you wish to engage the AFC mode again, press the AFC button. The AFC indicator lights again.
- On-screen display for fine-tuning mode is available in three languages; English, German and French. See "LANGUAGE Button" on page 11.
- The illustration on this page shows an example when the "English" mode is engaged.

5 Press MEMORY button ④ to store the channel in memory at a specific Channel Position.

Note: The setting of the AFC (on or off) is also memorised.

6 Repeat steps 2 to 5 to store channels for up to 48 positions.

7 Press the PROGRAM button ① again to release the PROGRAM mode.

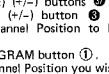
Notes:

- In step 3 above, when performing the auto scanning procedure for higher-frequency channels, if the scanning does not stop at a station due to condition of there being weak signals, etc., press SEARCH again to stop scanning. Then, perform the auto scanning of lower-frequency channels, or press either FINE (+/-) button to perform fine manual tuning.
- If a broadcast station is not transmitting TV signals because its broadcast time is already over, or because the broadcast has been interrupted for some reason, tuning is not possible with SEARCH button.

Skipping Channel Positions

Channel Positions you do not use can be skipped when the up/down channel selection is performed by pressing the CHANNEL (PAGE) (+/-) buttons ⑰ on the Remote Control or the CHANNEL (+/-) button ⑧ on the front panel. For cancelling the Channel Position to be skipped, proceed as follows.

(1) Press the PROGRAM button ①.
(2) Select the Channel Position you wish to skip.
(3) Press SKIP button ⑤. The following on-screen display appears to show that the Channel Position is skipped.



(4) Repeat above steps for skipping channels as many as you wish.
(5) Press the PROGRAM button again to release the mode.

Notes:

- Channel Positions 20 to 47 have been skipped when shipping.
- Skipped channel positions can be selected using 10-digit keypad ⑱.
- To cancel a skipped channel position (for example, channel position 10), do the following:
  (1) Using 10-digit keypad ⑱, select the skipped channel position (for example, channel position 10) you wish to cancel.
  (2) Press PROGRAM button ① to enter the program mode.
  (3) Press MEMORY button ④.
  (4) Press PROGRAM button ① again to release the mode.

TV/CABLE CHANNEL CONVERSION CHART

DISPLAY	CH02	CH03	CH04	CH05	CH06	CH07	CH08	CH09	CH10	CH11	CH12	CH13	CH14	CH15	CH16	CH17	CH18	CH19	CH20	CH21	CH22	CH23	CH24
CHANNEL	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	A	B	C	D	E	F	G	H	E21	E22	E23	E24
BAND	VL	VL	VL	VH	VH	VH	VH	VH	VH	VH	VH	VL	VL	VH	VH	VH	VH	VH	VH	U	U	U	U
DISPLAY	CH25	CH26	CH27	CH28	CH29	CH30	CH31	CH32	CH33	CH34	CH35	CH36	CH37	CH38	CH39	CH40	CH41	CH42	CH43	CH44	CH45	CH46	CH47
CHANNEL	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E41	E42	E43	E44	E45	E46	E47
BAND	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
DISPLAY	CH48	CH49	CH50	CH51	CH52	CH53	CH54	CH55	CH56	CH57	CH58	CH59	CH60	CH61	CH62	CH63	CH64	CH65	CH66	CH67	CH68	CH69	CC01
CHANNEL	E48	E49	E50	E51	E52	E53	E54	E55	E56	E57	E58	E59	E60	E61	E62	E63	E64	E65	E66	E67	E68	E69	S1
BAND	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	VH
DISPLAY	CC02	CC03	CC04	CC05	CC06	CC07	CC08	CC09	CC10	CC11	CC12	CC13	CC14	CC15	CC16	CC17	CC18	CC19	CC20	CC21	CC22	CC23	CC24
CHANNEL	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24
BAND	VH	VH	VH	VH	VH	VH	VH	VH	VH	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS
DISPLAY	CC25	CC26	CC27	CC28	CC29	CC30	CC31	CC32	CC33	CC34	CC35	CC36	CC37	CC38	CC39	CC40	CC41	CC42	CC43	CC44	CC45	CC46	CC47
CHANNEL	S25	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38	S39	S40	S41	X	Y	Z			
BAND	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VS	VL	VL	VL			

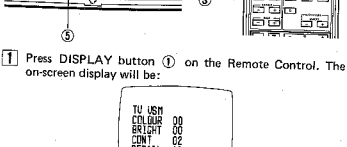
- "CH 13" to "CH 20" are TV channels in Italy.
- "CH 04" and "CH 14" are tuned to the same broadcast receiving frequency; and also "CH 05" and "CH 16" are the same. Therefore, for example, if there is a TV broadcast on "CH 04", this same broadcast can be received on "CH 14" as well.

ENGLISH

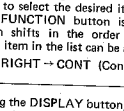
PICTURE ADJUSTMENT/VSM (Video Status Memory) OPERATION

Your TV set incorporates the VSM (Video Status Memory) system that can store preset picture adjustments for each mode (TV, VIDEO1 and VIDEO2), allowing you to keep specific picture adjustments to your preference, depending on each mode (source).

Note: On-screen display for picture adjustment/VSM mode is available in 3 languages: English, German and French. See "LANGUAGE Button" on page 11. Illustrations on this page show the example when the "English" mode is engaged. (The English mode is engaged when shipped.)



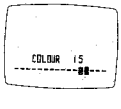
1 Press DISPLAY button ① on the Remote Control. The on-screen display will be:



2 Press FUNCTION button ② either on the front panel or Remote Control to select the desired item for adjustment. Each time the FUNCTION button is pressed, the red-coloured portion shifts in the order below to indicate that the coloured item in the list can be adjusted.

COLOUR → BRIGHT → CONT (Contrast) → DETAIL →

- Before pressing the DISPLAY button, if the FUNCTION button is pressed, only one item with its reference scale appears on the screen. Each time it is pressed, the item appearing on the screen changes in the same order as above. See Regular Adjustment procedure on the right.



3 After selecting the desired mode, press LEVEL (+/–) buttons ③ to make your preferred adjustment according to the chart below. (This must be done while the selected mode indication is being displayed, in the case of displaying only one item.) At this time, "00" (the centre position of the scale) is only a reference level, rather than a standard setting. Reference level (number) can be varied from "–30" to "30".

(–)	Item	(+)
Subdued	COLOUR	Vivid
Dark	BRIGHT	Bright
Low	CONT	High
Soft	DETAIL	Sharp

4 If you wish to store the adjustment settings in the VSM, after completing adjustments for all items, press the MEMORY button ④. The display blinks once to indicate that the settings have been memorised.

5 Press the DISPLAY button again to turn off the display.

Notes:

- This VSM setting is effective only for the current TV mode (TV, VIDEO1 or VIDEO2). When you wish to set the VSM for other modes, first select the mode, then follow the above steps.
- When you wish to restore all adjustment modes to "00" (their scales' at centre position), press STANDARD button ⑤ either on the Remote Control or front panel.
- If you wish to store their standard settings ("00") in memory, press the STANDARD button, then press the MEMORY button. If the MEMORY button is not pressed, the VSM setting which has been previously set cannot be cancelled.

Regular Picture Adjustment Procedure

(1) Press the FUNCTION button to select the item you wish to adjust.

(2) Press the LEVEL (+/–) buttons to adjust the item to your preferred level.

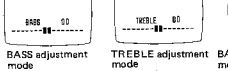
Notes:

- After completion of above settings, pressing the MEMORY button ④ will store those settings in the VSM.
- When you change the input mode (TV, VIDEO1 or VIDEO2), the settings restore to the VSM setting which has been previously set.

SOUND ADJUSTMENT CONTROLS

ENGLISH

- Audio tone ("BASS" and "TREBLE") and speaker balance ("BALANCE") can only be adjusted via the Remote Control.

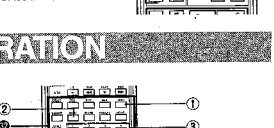


BASS adjustment mode | TREBLE adjustment mode | BALANCE adjustment mode

Note: On-screen display for sound adjustment mode is available in 3 languages: English, German and French. See "LANGUAGE Button" on page 11. Illustrations on this page show an example when the "English" mode is engaged.

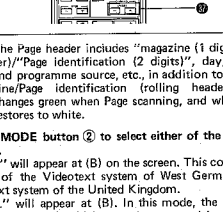
- Pess either "+" ("R") or "–" ("L") side to fine adjust each item to your preference. A reference number (–30 to 30) and an adjustment scale with a marker appear on the screen. (Only an adjustment scale is displayed for the BALANCE adjustment.)

(–)	Item	(+)
Soft	BASS	Sharp
Soft	TREBLE	Sharp
Left	BALANCE	Right



TELETEXT OPERATION

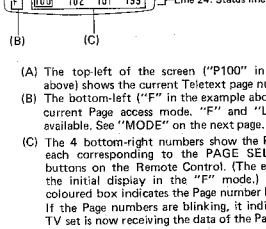
Your TV set is designed for use with the Videotext system of West Germany and the Fastext system of the United Kingdom.
Other Teletext systems of a different standard cannot be received. For details of Teletext broadcasts, consult your local dealer or Teletext company.
Note: All Teletext control buttons ⑫ are located on the Remote Control.



Basic Operating Procedure

Note: Tune in the TV station that is broadcasting Teletext information.

1 Press TEXT button ① to engage the TEXT (Teletext) mode. A Teletext programme appears on the screen. At this time:



(A) The top-left of the screen ("P100" in the example above) shows the current Teletext page number.
(B) The bottom-left ("F" in the example above) shows the current Page access mode. "F" and "L" modes are available. See "MODE" on the next page.
(C) The 4 bottom-right numbers show the Page numbers, each corresponding to the PAGE SELECT 1/2/3/4 buttons on the Remote Control. (The example shows the initial display in the "F" mode.) The one in a coloured box indicates the Page number being selected. If the Page numbers are blinking, it indicates that the TV set is now receiving the data of the Pages.
(D) The Page header includes "magazine (1 digit or character)/"Page identification (2 digits)", day, date, time and programme source, etc., in addition to (A). "Magazine/Page identification (rolling header)" section changes green when Page scanning, and when reached, restores to white.

2 Press MODE button ② to select either of the "F" or "L" mode.
F: "F" will appear at (B) on the screen. This corresponds to both of the Videotext system of West Germany and the Fastext system of the United Kingdom.
L: "L" will appear at (B). In this mode, the teletext programmes (Pages) which users have stored in the memory can be viewed. For storing teletext programmes, see "STORE" on next page.
Note: After once the Main Power is turned off and on, and the Text mode is engaged, the "F" mode is always engaged initially.

3 Select the desired page number as follows.
1) Using CHANNEL (PAGE) (+/–) buttons ⑫ :
- Selects the next ("+" button for 1-page higher-number, "–" button for lower-number) Page. For example, if the current displayed Page is "P200", it selects "P201" or "P199".
- Pressing CHANNEL (+/–) button ⑫ on the front panel performs the same operation.
- Available Page numbers are "P100" to "P899".

2) Using 10-digit keypad:
- For example, if you wish to select Page 450, press "4", "5" and "0". The digits (Page number) you have just keyed in are displayed at (A) and changes to green. The TV set begins the Page searching procedure. The "rolling header" in (D) rolls. When reached, the rolling header stops at the specified Page number, and (A) changes to white from previous green. (When a Page on at (A) does not exists, the rolling header continues rolling.)

3) **Using PAGE SELECT buttons ⑧ :**

(A) When in the "F" mode:
Always certain 4 Pages of Teletext programmes are being received. Press one of the PAGE SELECT buttons corresponding to the Pages numbers at (C) on the screen.

(B) When in the "L" mode:
Press the corresponding PAGE SELECT button to select the Page which has been stored in memory. (For storing Pages, see "STORE".)

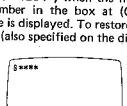
Note:
If the Page you selected is a newsflash or a subtitle programme, the regular TV picture remains displayed, and the Teletext information is superimposed, in a black box, on the TV picture. (The Page header and status line disappear after 5 seconds. However, when a new Page is selected, they appear in a box.) In this mode, pressing the MIX button will make the box where the Page header and status line are located disappear.

4 To release the TEXT mode, press either the TV button ⑨, VIDEO1 button ⑤ or VIDEO2 button ⑥ on the Remote Control, or TV/VIDEO button ⑩ on the front panel.

Special Operating Options

DISPLAY CANCEL
Press DISPLAY CANCEL, then the Teletext display disappears and a regular TV programme will appear. This function is convenient when selecting a certain Page that takes a long time to be reached. For example, if you select "Page 550", key in "5", "5" and "0". Page searching begins. Then, press DISPLAY CANCEL to view the regular TV programme until the Page is reached. When it is reached, the box with "P550" appears to indicate that the Page has been reached.
To release the DISPLAY CANCEL mode, press the TEXT or MIX button. The teletext display appears on the screen.

TIME PAGE
A Teletext station can transmit Sub-Pages that you can select yourself with a 4-digit "time" number which is supplied by the station and specified on a Teletext Page display. Press TIME PAGE, and "S****" appears at (A), replacing the current Page number. Then, key in 4 digits (Time Code) as specified on the display. For example, if the current Page number is "250", and the Time Code is "1234", when the final digit ("4") is keyed in, the Page number in the box at (C) changes to "250+". And the Sub-Page is displayed. To restore the previous Page, key in its Time Code (also specified on the display).



When you wish to select another Page on the Index ("Page 100"), press TIME PAGE again. The "S****" disappears to allow a new Page selection.

- Acceptable Time Code is up to "S3979".
- The Time Code may not correspond to the current time.

SIZE
Press to enlarge the upper half of the Teletext display. Press again to enlarge the lower half. Press again to restore the display to normal size.

MIX
Press to display a regular TV programme behind the selected Teletext Page. To release the Mix mode, press TEXT to restore the Text mode, or press TV, VIDEO1 or VIDEO2 to restore either of these modes.

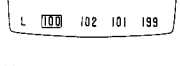
BROWSE
Press to scan the Pages at random.

MODE
Press to switch the Page access mode between "L" and "F". "L" or "F" will appear on the bottom-left of the screen to indicate the mode. First Main Power is turned on, the "F" mode is always engaged initially.

F mode: For example, when "P150" is selected, "P149", "P150", "P151" and "P152" will be stored in memory automatically. And quick selection of those Pages is possible. (Only when used with the Videotext system.)

L mode: Quick selection of Pages which have been already stored is possible. (For storing Pages, see "STORE" below.) This mode is useful when you watch the same Pages everyday.

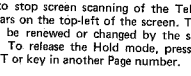
STORE
Press to store the Pages in the "L" mode.
Proceed as follows:
1) First engage the "L" mode.
2) Press PAGE SELECT 1, then key in the Page number you wish to store in position "1". Repeat this step for each position. ("1" to "4").
3) Firmly press STORE. (Keep it pressed for more than 1 second.) Four boxes on a bottom line blink once and change to white, then restore to the original colour to indicate that the 4 Pages are memorised.
When calling up the memorised Page, just press the corresponding PAGE SELECT button.



Notes:
- Channel Positions "0" to "14" are available for memorising Teletext Pages, each with 4 Pages, so that up to 60 Pages can be memorised.
- The one extra memory is available for Channel Positions other than the above (higher than Channel Position "14") and it is used in common. For example, when "P100", "P105", "P110" and "P115" are stored in Channel Position "16", and then if "P101", "P106", "P111" and "P116" are stored in Channel Position "16", the Pages which have been stored in Channel Position "15" will be cancelled automatically.

REVEAL
Some Teletext Pages may contain "questions" with "answers" concealed in the Page. Press REVEAL to display "answers". To conceal them, press REVEAL again.

HOLD
Press HOLD to stop screen scanning of the Teletext display. "HOLD" appears on the top-left of the screen. Then, this Page can no longer be renewed or changed by the station's transmitted signals. To release the Hold mode, press HOLD again or, press RESET or key in another Page number.



ENGLISH

ENGLISH

RESET

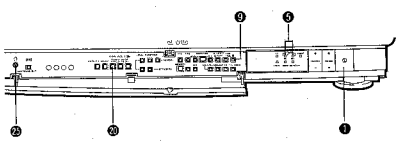
F mode: Press RESET any time you wish to initialise the Teletext Page to "Page 100".

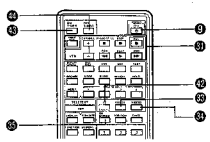
L mode: Pressing this button returns to one of the memorised Pages.

Notes:

- In the Text mode, it is not possible to adjust the colour, brightness, contrast and detail (except for the MIX mode).
- The Teletext signals are transmitted together with regular TV broadcast signals. Therefore, if the TV station is not fine-tuned, the Teletext information may have video noise or be distorted.
- After once the Main Power is turned off and on, and the Text mode is engaged, the "F" mode is always engaged initially.
- If a Page is displayed that is not desired, first select another Page (any Page), then select the desired Page again.
- For details of Teletext, consult your local dealer or Teletext broadcast station.

CONVENIENT FUNCTIONS

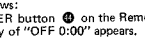




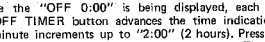
OFF TIMER

The "OFF TIMER" function allows you to turn off your TV set automatically after a preset time of up to 2 hours. Set the OFF TIMER as follows:

1 Press OFF TIMER button ❹ on the Remote Control. The on-screen display of "OFF 0:00" appears.
- At this time, if the OFF TIMER has been already set, the remaining time before automatic switch-off is displayed.



2 While the "OFF 0:00" is being displayed, each press of OFF TIMER button advances the time indication in 30-minute increments up to "2:00" (2 hours). Press until the desired setting time appears on the screen. The OFF TIMER activates automatically. "OFF" of TIMER indicators ❺ remains lit to show that the OFF TIMER is in operation.



3 While the OFF TIMER is operating, you can confirm the remaining time. Just press OFF TIMER button. The remaining time is displayed on the screen.

At this time, another press of OFF TIMER button will cancel the time previously set, and allow you to reset the time.

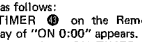
Notes:

- The OFF TIMER does not turn off the main power of the TV set.
- In the case of power failure after the OFF TIMER has been set, when power is reapplied, the TV will switch off automatically after 30 minutes. This also happens when the main power is switched on and off after the OFF TIMER is set. Therefore, in this case, set the setting of the OFF TIMER to 0:00 before switching off the main power so that the TV can be enjoyed continuously.
- When the remaining time reaches 1 minute, "OFF 0:01" appears on the screen and blinks for a few seconds.
- The on-screen display of OFF TIMER and ON TIMER modes can be in any of three languages: English, German and French. Illustrations on this page show examples with the "English" mode engaged.

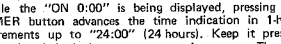
ON TIMER

The "ON TIMER" function allows you to turn on your TV set automatically after a preset time of up to 24 hours. Set the ON TIMER as follows:

1 Press ON TIMER ❸ on the Remote Control. The on-screen display of "ON 0:00" appears.
- At this time, if the ON TIMER has been already set, the remaining time before automatic switch-on is displayed.



2 While the "ON 0:00" is being displayed, pressing ON TIMER button advances the time indication in 1-hour increments up to "24:00" (24 hours). Keep it pressed until the desired time appears on the screen. The ON TIMER activates automatically. "ON" of TIMER indicators ❺ remains lit to show that the ON TIMER is in operation.



3 While the ON TIMER is operating, with TV powered, you can confirm the remaining time. Just press ON TIMER button, and the remaining time is displayed on the screen.
- At this time, another press of ON TIMER button will cancel the time previously set, and allow you to reset the time.

4 Finally, press POWER button ❶ on either the Remote Control or front panel to turn the power off.

Notes:

- The ON TIMER is not cancelled even if the power button is pressed to turn the power on and off after the timer setting.
- If the Main Power button ❶ is pressed to turn the main power off, the ON TIMER is cancelled. (It is also cancelled in the case of power failure.)
- Once the ON TIMER turns the TV on automatically, if the TV is not operated in any way, after 1 hour the TV will turn off automatically for safety. A single adjustment, even audio level adjustment or channel selection, will cancel this safety switch-off function.

VTR CONTROLS

Your TV set's Remote Control is provided with additional buttons ㉑ for controlling most major functions (POWER, PLAY, REC, STOP, PAUSE/STILL, REW, FWD and CHANNEL (+, -)) of the specific JVC VTRs listed below. Each button's designation coresponds to that of the VTRs'. Refer to the instruction manual of the VTR for detailed operation.

Operable JVC VTRs*

HR-D455 [□]	HR-D157MS	HR-D370 [□]
HR-D250 [□]	HR-D158MS	HR-D470 [□]
HR-D565 [□]	HR-D257MS	HR-D755 [□]
HR-D566 [□]	HR-D170 [□]	HR-S5000 [□]
HR-D725 [□]	HR-D180 [□]	

* In addition to the above, all new models of JVCs are operable.
[□] : Suffix of each model designate specific areas and specifications.

Notes:

- The VTR's RF output switching is also possible. (With some models, this function is not available.) Press VIDEO 1 ㉙ or VIDEO 2 ㉚ button to output recording playback signals from VTR. Press TV button ㉒ to output off-air broadcast signals which are input to VTR's aerial input connector.
- With some models, turning the power on and off is not possible.
- With some models, channel (+, -) switching does not work.
- VTRs of different colour or broadcast systems cannot be used in combination with this TV set.

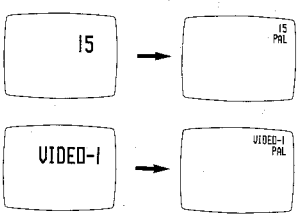
ENGLISH

ON SCREEN Button

Press ON SCREEN button ㉖ on the Remote Control. The following items will appear on the screen for checking.

- After a few seconds, the Channel Position number or Real Channel number (with "CH" or "C"), or VIDEO mode indication ("VIDEO1" or "VIDEO2") will shift to the upper right of the screen. At this time, the colour system indication also appears.

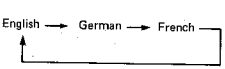
Press ON SCREEN again to clear the display.



Note: The colour system indication does not appear when receiving a black/white broadcast.

LANGUAGE button

The on-screen indications of the picture adjustment/VSM control, sound adjustment, fine-tuning, ON timer and OFF timer can be in any of 3 languages: English, German and French. While the indication appears on the screen, press LANGUAGE button ㉔. The language mode changes in the order below.



Available on-screen indications (switched with LANGUAGE button)			Page
English	German	French	
FINE	FEINABST.	FIN	6
COLOUR	FARBE	COULEUR	7
BRIGHT	HELL.	LUMIERE	7
CONT	KONT.	CONT.	7
DETAIL	SCHAERFE	DETAIL	7
BASS	TIEFEN	GRAVE	8
TREBLE	HOEHEN	AIGU	8
L	L	G	8
R	R	D	8
ON	EIN	MPM	10
OFF	AUS	APM	10

SKEW Button

In the VTR playback, press SKEW button ㉛ on the front panel to correct distorted or skewed portion of the top of the picture, due to degraded video tape.
Normally (for viewing TV or video tape playback), set to ON (▬) position. Set to OFF (▄) if pictures are blurred laterally in areas where broadcast signals are weak.

MUTE Button (🔇)

Press MUTE button ㉘ to silence the TV sound. Then, the onscreen indication appears. Press again to restore the sound to its previous level.

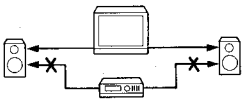
Headphone Jack (∩)

Connect a stereo mini plug of the headphones to this headphone jack ㉜. When connected, audio output from built-in speakers and the speakers connected to the external speaker terminals are switched off automatically.

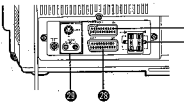
CONNECTING EXTERNAL EQUIPMENT

ENGLISH

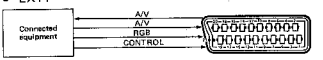
- Prior to making any connections to your TV set, be sure to turn the Main Power off.
- For more detailed understanding of each connection, it is recommended that you read the instruction manual for each component.
- If you operate a video or audio component placed near the TV set, picture and/or sound may become noisy because of interference between components. In such a case, place the components at a sufficient distance from each other.
- Do not connect another audio source to the same speaker to which the TV set is connected, otherwise damage may result to the amplifier of the TV set or to that of the other audio source.



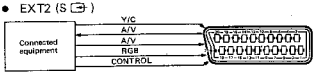
- The following shows examples for connecting external equipment.



- EXT1

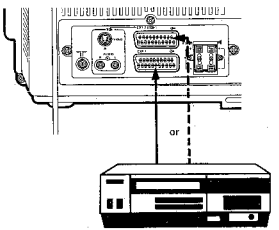


- EXT2 (S ⊡)



1 Connecting to VTRs (for playback)

(1) Connect each component as illustrated.
(2) Set S-input select button ⑱ to OFF (▬).



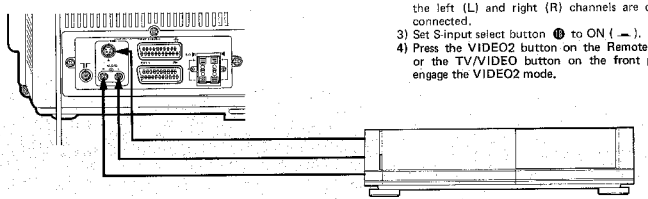
Video recorder

(3) Press VIDEO1 button ㉙ or VIDEO2 button ㉚ on the Remote Control, or TV/VIDEO button ⑯ on the front panel to engage either VIDEO mode as follows:
VIDEO1: When viewing pictures from the VTR connected to EXT1 connector ㉘.
VIDEO2: When viewing pictures from the VTR connected to EXT2 (S ⊡) connector ㉗.

Notes:
- When a VTR is connected to EXT1 or EXT2 (S ⊡), the playback picture can be seen in all modes.
- When two VTRs which are connected to these connectors are switched to playback at the same time, the VTR connected to EXT 2 has priority.

2 Connecting to an S-VHS VTR (for playback)

Your TV set is equipped to accept the separated Y (luminance) and C (chrominance) video signals, conforming to the S-VHS (Super VHS) Euro, System, ideal for connection of an S-VHS VTR.

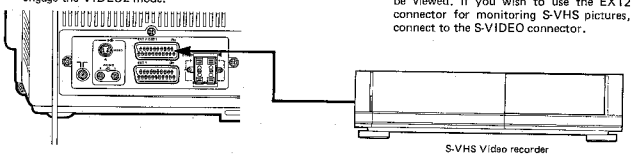


S-VHS-Video recorder

(1) **Using the S-VIDEO/AUDIO input connectors ㉙**
1) Connect the VTR's S-OUT connector (4-pin) to the TV set's S-VIDEO connector (4-pin).
2) Connect the VTR's AUDIO OUT connectors to the TV set's AUDIO connectors while making sure that the left (L) and right (R) channels are correctly connected.
3) Set S-input select button ⑱ to ON (▬).
4) Press the VIDEO2 button on the Remote Control or the TV/VIDEO button on the front panel to engage the VIDEO2 mode.

(2) Using the EXT2 (S⇨) connector ⑰

1) Connect the VTR's A/V OUT connector (21-pin Euroconnector) to the TV set's EXT2 (S⇨) connector.
2) Set the S-input select button ⑱ to ON (▬).
3) Press the VIDEO2 button on the Remote Control or the TV/VIDEO button on the front panel to engage the VIDEO2 mode.



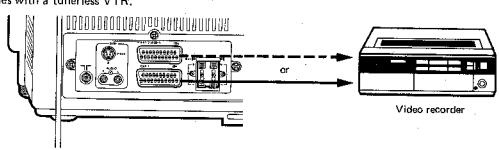
S-VHS Video recorder

Notes:

- When an S-VHS VTR is connected to the S-VIDEO connector, the EXT2 (S⇨) connector is inoperable.
- When S-VHS VTRs are connected to the S-VIDEO and EXT2 (S⇨) connectors at the same time, pictures from the EXT2 (S⇨) connector cannot be viewed. If you wish to use the EXT2 (S⇨) connector for monitoring S-VHS pictures, do not connect to the S-VIDEO connector.

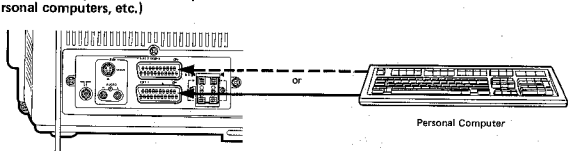
3 Connecting to a VTR (for recording)

- The video and audio signals of the broadcast being received can be output via the EXT1 or EXT2 (S⇨) connector (TV output). Convenient for recording TV programmes with a tunerless VTR.



Video recorder

4 Connecting to a component that outputs RGB signals (Personal computers, etc.)



Personal Computer

1) Connect the component to the EXT1 and/or EXT2 (S⇨) connector(s).
2) Set the RGB button ⑲ as follows:
   EXT1 (▬) : To view pictures from the component connected to the EXT1 connector.
   EXT2 (▬) : To view pictures from the component connected to the EXT2 (S⇨) connector.

Notes:

- While the connected component is being powered, regular TV broadcasts cannot be viewed in the TV mode.
- When a component is connected to the EXT2 (S⇨) connector, set the S-input select button to OFF (▬). If it is set to ON (▬), red is not displayed. (Pictures only with green and blue are displayed.)
- Pictures from the connected component can be viewed in any mode. (Except the superimposed pictures from a personal computer provided with the superimposition function.) If components are connected to both connectors at the same time, only pictures from component which is connected to the EXT 2 connector can be viewed. When viewing pictures from the component which is connected to the EXT 1 connector, turn the power of the component off, or disconnect the component form the connector.

ENGLISH

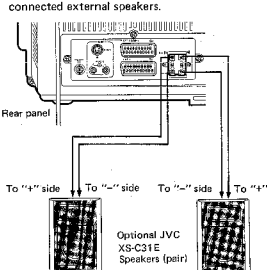
Notes on connecting to external component(s)

- When components are connected to both the EXT1 and EXT2 (S ⇄) connectors at the same time, be sure to turn the power of the component which is not being used off. If both components are switched on, pictures from the component connected to the EXT2 (S ⇄) connector will be seen. If a component which outputs RGB signals is connected to the EXT1 connector and a component which outputs a video signal such as a VTR is connected to the EXT2 (S ⇄) connector, normal pictures cannot be seen.
- When S-VHS VTRs are connected to both the S-VIDEO/AUDIO input connectors and the EXT2 (S ⇄) connector at the same time, only the pictures from the S-VHS VTR connected to the S-VIDEO/AUDIO input connecters will be seen and pictures from the S-VHS VTR connected to the EXT2 (S ⇄) connector will not be seen. If you wish to see pictures from the S-VHS VTR connected to the EXT2 (S ⇄) connector, the S-VHS VTR connected to the S-VIDEO/AUDIO input connectors should be unplugged.
- The pictures of a component (regular VTR, personal computer, etc.) can be seen in any mode (TV, VIDEO 1 or VIDEO 2), except when viewing pictures of an S-VHS VTR connected to the S-VIDEO/AUDIO input connectors. At this time, when the component is turned on, pictures from the component will be displayed on the screen automatically. As the mode is not changed, the VSM (Video Status Memory) settings are not changed.

5 Using the external speakers

(Optional JVC XS-C31E speakers or other stereo speakers)

- Connect speaker cables (a pair of stereo speakers) while making sure that the speakers' polarities are wired correctly.
- Set the external speaker switch ㉑ to EXT. The sound output will be switched from the built-in speakers to the connected external speakers.



Notes:

- Use speakers of 8-ohm impedance.
- If the "+" and "–" terminals are short-circuited, it may cause a damage to speakers.
- It is recommended to use magnetically shielded speakers. If you use speakers other than those, place them at a sufficient distance from the TV, otherwise the magnetic field generated from such speakers cause unsteady picture colour.
- Do not connect another audio source to the same speakers to which the TV is connected, otherwise a damage may result to the amplifier of the TV or to that of the other audio source.

CAUTION

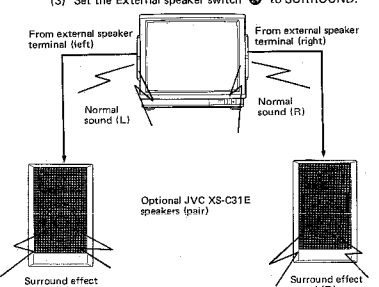
Before connecting to the external speakers, be sure to turn the Main Power off. If no sound is heard from the external speakers, turn the Main Power off, and check the connection.

6 Listening to Surround Effect Sound

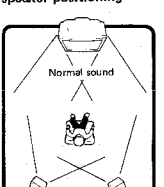
The combination of the normal stereo sound and the "surround effect" sound obtainable from optional speakers connected to your TV set will give a three-dimensional aural experience.

- Surround effect sound can be listened to only when the source is stereo sound. (In case of monaural sound, Surround sound is not possible)
- In the case of a monaural sound source, the surround effect sound cannot be realised.
- Set the BALANCE control (marker) to its centre position.
- It is recommended that the external speakers which are intended to output "Surround effect sound" are located in back of the listening position to obtain maximum Surround effect.

(1) Connect speakers as illustrated.
Optional XS-C31E Surround Speaker system, designed for this unit, is also available from JVC.
(Be sure to connect both the right and left channel speakers. No sound will be output if only a single speaker is connected.)
(2) Select the stereo sound source.
(3) Set the External speaker switch ㉑ to SURROUND.


From external speaker terminal (left)
From external speaker terminal (right)
Normal sound (L)
Normal sound (R)
Optional JVC XS-C31E speakers (pair)
Surround effect sound (L)
Surround effect sound (R)

Example for speaker positioning



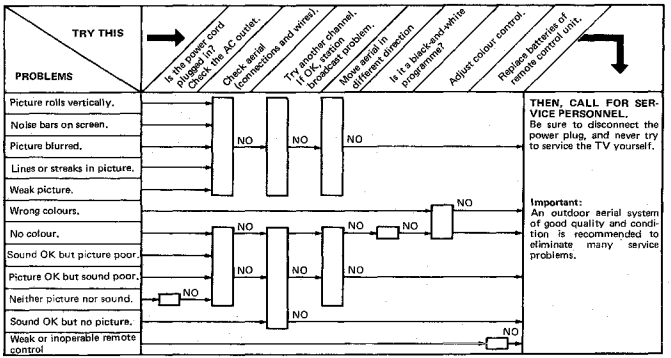
Setting of external speaker switch ㉑

The output sound differs depending on the switch setting.

Switch setting	Output sound	
	Built-in speakers	Speakers connected to the external speaker terminals
EXT	No sound	Normal sound
SURROUND	Normal sound	Surround effect sound

BEFORE YOU CALL FOR SERVICE

Be sure to review all the instructions written in this booklet. Then try to check according to the following chart.

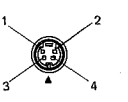

TRY THIS
PROBLEMS
Is the power cord plugged in? Check the AC outlet.
Check aerial (connections and wires).
Try another channel. If OK, station broadcast problem.
Move aerial in different direction
Is it a black-and-white programme?
Adjust colour control.
Replace batteries of remote control unit.
Picture rolls vertically.
Noise bars on screen.
Picture blurred.
Lines or streaks in picture.
Weak picture.
Wrong colours.
No colour.
Sound OK but picture poor.
Picture OK but sound poor.
Neither picture nor sound.
Sound OK but no picture.
Weak or inoperable remote control
NO
THEN, CALL FOR SERVICE PERSONNEL.
Be sure to disconnect the power plug, and never try to service the TV yourself.
Important:
An outdoor aerial system of good quality and condition is recommended to eliminate many service problems.

SPECIFICATIONS

Type	: Colour TV
Screen size	: AV-S250ET/63 cm, AV-S280ET/70 cm diagonally measured; FST (Flat-Square Tube)
Reception system	: PAL CCIR B/G; SECAM CCIR B/G
Sound multiplex system	: Conforms to West German system (built-in decoder)
Tuner	: Frequency synthesizer Euro-wide-band tuner (compatible with CATV)
Channel coverage	: VHF/UHF/S-band (including super and hyper bands) 112 channels (48 channels can be preset)
Power requirement	: 220 V AC, 50 Hz
Power consumption	: AV-S250ET/Max. 150 W, Avg. 110 W AV-S280ET/Max. 160 W, Avg. 120 W
External input/output	: 21-pin Euroconnector (SCART); 2 sets (EXT1/EXT2)
	Video: Input/1 Vp-p, 75 ohms
	Output/1 Vp-p, 75 ohms
	Audio: Input/500 mV rms, high impedance
	Output/500 mV rms, low impedance
	R/G/B: Input/700 mVp-p, 75 ohms
	Y/C (EXT2; S-input select button set to ON):
	Y/1.0 Vp-p, 75 ohms
	C/0.3 Vp-p (burst level), 75 ohms
	Y/C separate video input connector (4-pin)
	Y : 1.0 Vp-p, 75 ohms
	C : 0.3 Vp-p (burst level), 75 ohms
	Audio input connector (RCA)
	500 mV rms, high impedance
Audio output	: 10 W + 10 W (effective output) 15 W + 15 W (music power)
Speaker	: 10 cm round x 2, 3 cm round x 2
Aerial input impedance	: 75 ohms, unbalanced
Teletext system	: Conforms to Teletext systems of West Germany and the United Kingdom system (compatible with FLOF); built-in European CCT (Computer Controlled Teletext) decoder
Dimensions (WxHxD)	: AV-S250ET/65.8 x 51.2 x 44.8 cm AV-S280ET/72.5 x 56.9 x 48.7 cm
Weight	: AV-S250ET/31 kg AV-S280ET/37.5 kg
Accessories	: Remote control unit (RM-C703) x 1 R6-size dry cell battery x 2

4-Pin Y/C separate video input connector

- **Pin assignment**

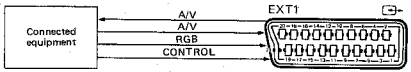


Pin No.	Signal
1	GND
2	GND
3	Y (luminance)/1 Vp-p, 75 ohms
4	C (chrominance)/0.3 Vp-p (burst level), 75 ohms

21-pin Euroconnector (SCART socket)

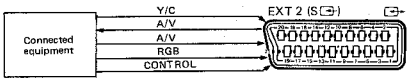
- Pin assignment

EXT 1



Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	AUDIO output	8	Slow SW	15	RED input
2	AUDIO input	9	GREEN GND	16	Blanking (Rapid SW)
3	AUDIO output	10	NC	17	GND (for video output)
4	AUDIO GND	11	GREEN input	18	GND (for video input)
5	BLUE GND	12	NC	19	VIDEO output
6	AUDIO input	13	RED GND	20	VIDEO input
7	BLUE input	14	GND (N.C.)	21	GND

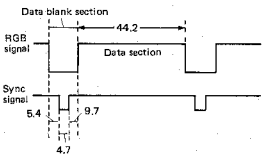
EXT2 (S ⇄)



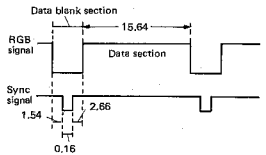
Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	AUDIO output	8	Slow SW	15	RED input/C input
2	AUDIO input	9	GREEN GND	16	Blanking (Rapid SW)
3	AUDIO output	10	NC	17	GND (for video output)
4	AUDIO GND	11	GREEN input	18	GND (for video input)
5	BLUE GND	12	NC	19	VIDEO output
6	AUDIO input	13	RED GND	20	VIDEO input/Y input
7	BLUE input	14	GND (N.C.)	21	GND

- **Recommended timing chart (21-pin Euroconnector (SCART socket))**

H.SYNC period (μ sec.)



V.SYNC period (m sec.)



Design and specifications subject to change without notice.